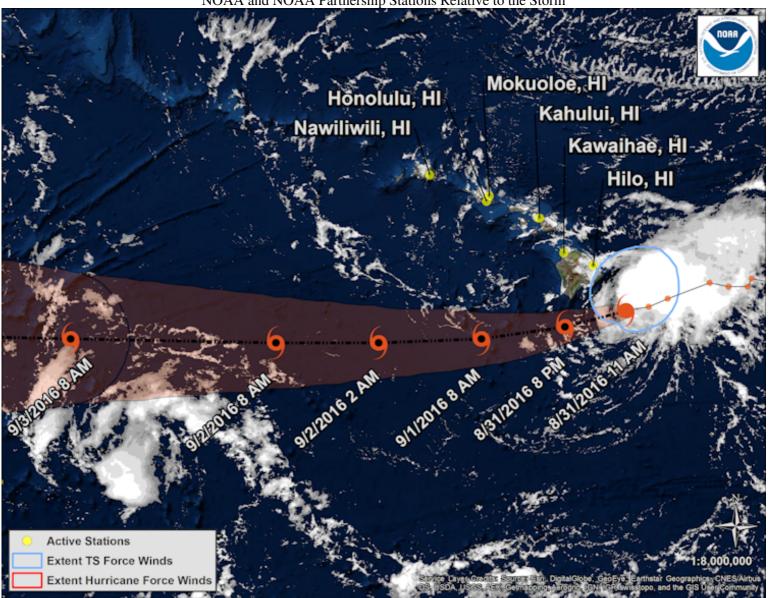




Hurricane MADELINE QuickLook Posted: 12:00 HST 08/31/2016

NOAA and NOAA Partnership Stations Relative to the Storm



Storm Analysis

As of 8/31/2016 12:00 HST, water levels across the Hawaiian Islands are slightly elevated and range between 0.3 and 1.0 feet above normal tide levels. Madeline will make its closest pass to Hawaii this afternoon. Winds are generally 20 knots or less with some higher gusts to 35 knots especially across the Big Island. Barometric pressure continues to fall across the Hawaiian Islands.

Water Level and Meteorological plots available below are updated automatically. A line denoting <u>Mean Higher High Water</u> (MHHW) is displayed to provide an approximate indication of when flooding inundation may occur.

For additional data, please see the <u>Center for Operational Oceanographic Products & Services</u> website. For more information or archived products and reports, please see the <u>Storm QuickLook</u> Homepage.

Analyst:CRD

SELECT CENTRAL PACIFIC HURRICANE CENTER ADVISORY INFORMATION:

HURRICANE MADELINE ADVISORY NUMBER 22 NWS CENTRAL PACIFIC HURRICANE CENTER HONOLULU HI - 1100 AM HST WED AUG 31 2016

...MADELINE WEAKENING AS IT DRAWS CLOSER TO HAWAII...

SUMMARY OF 1100 AM HST INFORMATION

LOCATION...18.6N 154.2W

ABOUT 95 MI... SE OF HILO HAWAII

ABOUT 305 MI... SE OF HONOLULU HAWAII

MAXIMUM SUSTAINED WINDS...75 MPH PRESENT MOVEMENT...W OR 260 DEGREES AT 13 MPH.

MINIMUM CENTRAL PRESSURE...991 MB

WATCHES AND WARNINGS

CHANGES WITH THIS ADVISORY:

The Hurricane Warning has been discontinued for Hawaii County. A Tropical Storm Warning is now in effect for Hawaii County.

SUMMARY OF WATCHES AND WARNINGS IN EFFECT:

A Tropical Storm Warning is in effect for...

- * Hawaii County
- * Maui County including the islands of Maui, Molokai, Lanai and Kahoolawe

A Tropical Storm Warning means that tropical storm conditions are expected somewhere within the watch area, in this case over the next 24 hours. Preparations to protect life and property should be complete.

For storm information specific to your area, please monitor products issued by the National Weather Service office in Honolulu Hawaii.

DISCUSSION AND 48-HOUR OUTLOOK

At 1100 AM HST, the center of Hurricane Madeline was located near latitude 18.6 North, longitude 154.2 West. Madeline is moving toward the west near 13 mph. This general motion is expected to continue for the next couple of days.

Maximum sustained winds are near 75 mph with higher gusts. Steady weakening is forecast during the next 48

hours.

Hurricane-force winds extend outward up to 10 miles from the center and tropical-storm-force winds extend outward up to 125 miles. During the past couple of hours, tropical storm force winds of 43 mph gusting to 51 mph have been reported at Kamuela Airport in Hawaii County.

The estimated minimum central pressure is 991 mb.

HAZARDS AFFECTING LAND

WIND: Tropical storm conditions are expected to continue over Hawaii County through tonight and will develop over portions of Maui County later today and tonight. Winds will be strongest over mountains and where winds blow downslope from higher terrain.

SURF: Swells generated by Madeline will continue to increase across Hawaiian waters today, possibly becoming damaging along east facing shores of Hawaii County and eastern portions of the Island of Maui into tonight.

RAIN: Madeline is expected to produce total rain accumulations of 5 to 10 inches, with isolated maximum amounts near 15 inches, across Hawaii County, especially over windward areas and the Kau District. Total rainfall accumulations of 1 to 3 inches, with isolated maximum amounts up to 4 inches, can be expected in the islands of Maui

County, mainly over windward terrain. This rainfall may lead to dangerous flash floods and mudslides.

NEXT ADVISORY

Next intermediate advisory at 200 PM HST.

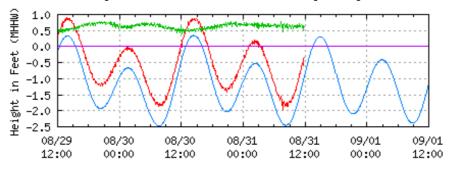
Next complete advisory at 500 PM HST.

Forecaster Wroe

For the purpose of timely release, data contained within this QuickLook have undergone a "limited" NOS Quality Assurance/Control; however, the data have not yet undergone final verification. All data subject to NOS verification.

Jump to: <u>Hilo, Hilo Bay, Kuhio Bay - Water Level, Hilo, Hilo Bay, Kuhio Bay - Winds, Hilo, Hilo Bay, Kuhio Bay - Barometric, Kawaihae - Water Level, Kawaihae - Winds, Kawaihae - Barometric, Kahului, Kahului Harbor - Water Level, Kahului, Kahului Harbor - Winds, Kahului, Kahului Harbor - Barometric, Mokuoloe - Water Level, Mokuoloe - Winds, Mokuoloe - Barometric, Honolulu - Water Level, Honolulu - Winds, Honolulu - Barometric, Nawiliwili - Water Level, Nawiliwili - Winds, Nawiliwili - Barometric</u>

NOAA/NOS/CO-OPS <u>1617760 Hilo, Hilo Bay, Kuhio Bay, HI</u> Preliminary Water Level, relative to Mean Higher High Water(MHHW)

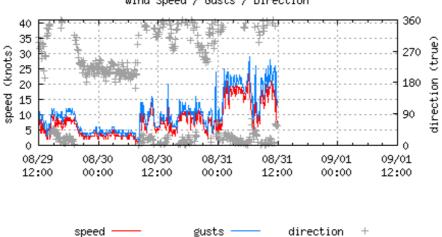


Predicted Tide _____ (Obs-Pred) _____ Observed WL ____ MHHW ____

Last Observed Sample: 08/31/2016 11:54 (HST). Data relative to MHHW Observed: -0.41 ft. Predicted: -0.90 ft. Residual: 0.49 ft. Historical Maximum Water Level: Jan 20 1981, 1.37 ft.

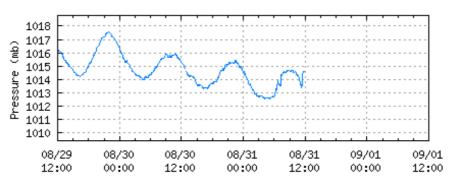
Next High Tide: 08/31/2016 14:56 (HST), 0.31 ft.

NOAA/NOS/CO-OPS 1617760 Hilo, Hilo Bay, Kuhio Bay, HI Wind Speed / Gusts / Direction



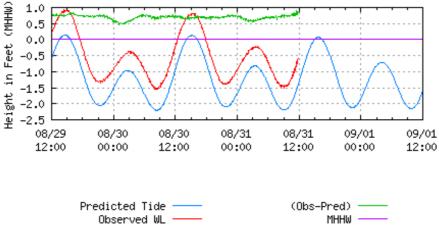
Last Observed Sample: 08/31/2016 11:54 (HST) Wind Speed: 4 knots Gusts: 8 knots Direction: 46° T

NOAA/NOS/CO-OPS <u>1617760 Hilo, Hilo Bay, Kuhio Bay, HI</u> Barometric Pressure



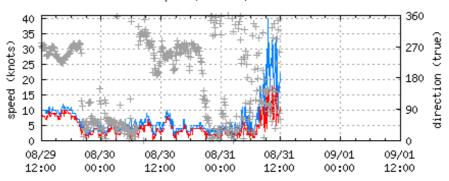
barometric pressure ——
Last Observed Sample: 08/31/2016 11:54 (HST)
Barometric Pressure: 1014.5 mb

NOAA/NOS/CO-OPS 1617433 Kawaihae, HI Preliminary Water Level, relative to Mean Higher High Water(MHHW) .0



Last Observed Sample: 08/31/2016 11:54 (HST). Data relative to MHHW Observed: -0.55 ft. Predicted: -1.37 ft. Residual: 0.82 ft. Historical Maximum Water Level: Dec 13 2008, 1.22 ft. Next High Tide: 08/31/2016 15:46 (HST), 0.08 ft.

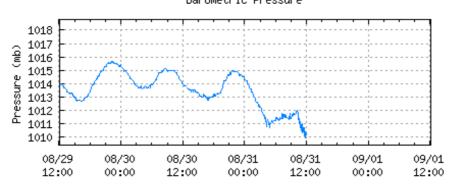
NOAA/NOS/CO-OPS <u>1617433 Kawaihae, HI</u> Wind Speed / Gusts / Direction



speed gusts direction + Last Observed Sample: 08/31/2016 11:54 (HST)

Wind Speed: 11 knots Gusts: 22 knots Direction: 62° T

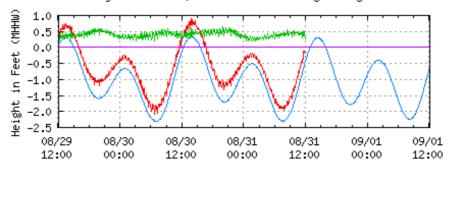
NOAA/NOS/CO-OPS <u>1617433 Kawaihae, HI</u> Barometric Pressure



barometric pressure ----

Last Observed Sample: 08/31/2016 11:54 (HST)
Barometric Pressure: 1010.2 mb

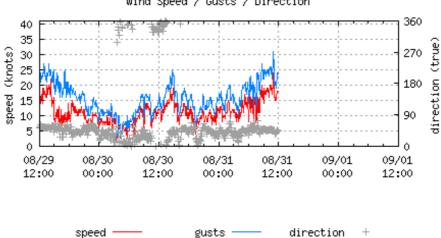
NOAA/NOS/CO-OPS 1615680 Kahului, Kahului Harbor, HI Preliminary Water Level, relative to Mean Higher High Water(MHHW)



Predicted Tide (Obs-Pred) — MHHW — Last Observed Sample: 08/31/2016 11:54 (HST). Data relative to MHHW

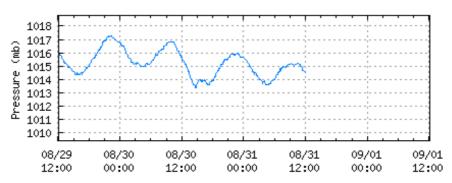
Observed: -0.19 ft. Predicted: -0.47 ft. Residual: 0.28 ft. Historical Maximum Water Level: Dec 20 1968, 1.23 ft. Next High Tide: 08/31/2016 14:23 (HST), 0.31 ft.

NOAA/NOS/CO-OPS 1615680 Kahului, Kahului Harbor, HI Wind Speed / Gusts / Direction



Last Observed Sample: 08/31/2016 11:54 (HST) Wind Speed: 18 knots Gusts: 24 knots Direction: 44° T

NOAA/NOS/CO-OPS 1615680 Kahului, Kahului Harbor, HI Barometric Pressure



barometric pressure ——
Last Observed Sample: 08/31/2016 11:54 (HST)
Barometric Pressure: 1014.5 mb

NOAA/NOS/CO-OPS 1612480 Mokuoloe, HI Preliminary Water Level, relative to Mean Higher High Water(MHHW) Height in Feet (MHHW) 1.0 0.5 0.0 -0.5 -1.0 -1.5 -2.0 -2.5 08/29 08/30 08/30 08/31 08/31 09/01 09/01 12:00 00:00 12:00 00:00 12:00 00:00 12:00

Last Observed Sample: 08/31/2016 11:54 (HST). Data relative to MHHW Observed: -0.09 ft. Predicted: -0.63 ft. Residual: 0.54 ft. Historical Maximum Water Level: Jan 8 1974, 1.46 ft. Next High Tide: 08/31/2016 14:31 (HST), 0.13 ft.

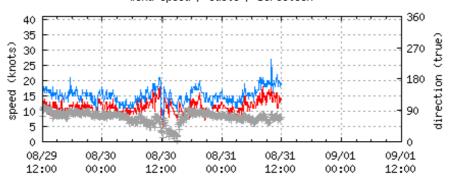
(Obs-Pred)

MHHW

Predicted Tide

Observed WL

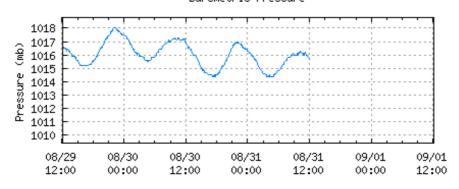
NOAA/NOS/CO-OPS <u>1612480 Mokuoloe, HI</u> Wind Speed / Gusts / Direction



speed gusts direction +
Last Observed Sample: 08/31/2016 11:54 (HST)

Wind Speed: 14 knots Gusts: 19 knots Direction: 69° T

NOAA/NOS/CO-OPS <u>1612480 Mokuoloe</u>, <u>HI</u> Barometric Pressure



barometric pressure ----

Last Observed Sample: 08/31/2016 11:54 (HST)
Barometric Pressure: 1015.7 mb

NOAA/NOS/CO-OPS 1612340 Honolulu, HI Preliminary Water Level, relative to Mean Higher High Water (MHHW) Height in Feet (MHHW) 1.0 0.5 0.0 -0.5 -1.0 -1.5-2.0 08/29 08/30 08/30 08/31 08/31 09/01 09/01 00:00 12:00 12:00 00:00 12:00 00:00 12:00

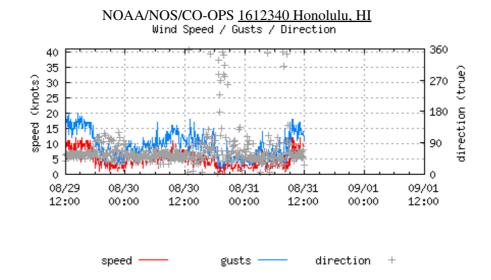
Last Observed Sample: 08/31/2016 11:54 (HST). Data relative to MHHW Observed: -0.78 ft. Predicted: -1.06 ft. Residual: 0.28 ft. Historical Maximum Water Level: Feb 14 1967, 1.49 ft. Next High Tide: 08/31/2016 15:44 (HST), 0.21 ft.

(Obs-Pred)

MHHW

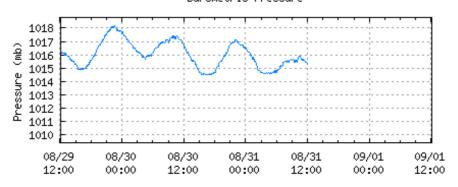
Predicted Tide

Observed WL



Last Observed Sample: 08/31/2016 11:54 (HST) Wind Speed: 6 knots Gusts: 11 knots Direction: 25° T

NOAA/NOS/CO-OPS <u>1612340 Honolulu, HI</u> Barometric Pressure

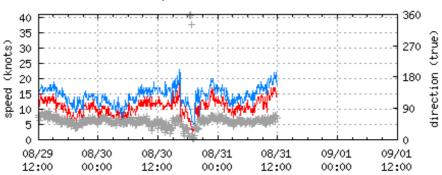


barometric pressure ——
Last Observed Sample: 08/31/2016 11:54 (HST)
Barometric Pressure: 1015.3 mb

NOAA/NOS/CO-OPS 1611400 Nawiliwili, HI Preliminary Water Level, relative to Mean Higher High Water(MHHW) Height in Feet (MHHW) 1.0 0.5 0.0 -0.5 -1.0 -1.5-2.0 08/29 08/30 08/30 08/31 08/31 09/01 09/01 12:00 00:00 12:00 00:00 12:00 00:00 12:00 Predicted Tide (Obs-Pred) Observed WL MHHW

Last Observed Sample: 08/31/2016 11:54 (HST). Data relative to MHHW Observed: -0.54 ft. Predicted: -0.86 ft. Residual: 0.32 ft. Historical Maximum Water Level: Sep 11 1992, 3.15 ft. Next High Tide: 08/31/2016 15:31 (HST), 0.16 ft.

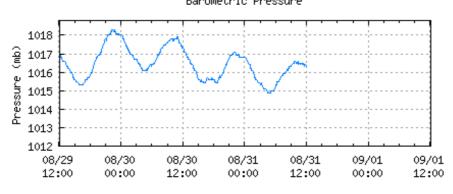
NOAA/NOS/CO-OPS 1611400 Nawiliwili, HI Wind Speed / Gusts / Direction



speed gusts direction + Last Observed Sample: 08/31/2016 11:54 (HST)

Wind Speed: 15 knots Gusts: 18 knots Direction: 60° T

NOAA/NOS/CO-OPS <u>1611400 Nawiliwili, HI</u> Barometric Pressure



barometric pressure ----

Last Observed Sample: 08/31/2016 11:54 (HST)

Barometric Pressure: 1016.3 mb

Latest Water Level Observations on MHHW

Station ID	Station Name	Date/Time	Observed Water Level	Predicted Tide	Residual Water Level	24 Hour Maximum Storm Tide
1617760	Hilo, Hilo Bay, Kuhio Bay, HI	08/31/2016 11:54 (HST)	-0.41 ft	-0.90 ft	0.49 ft	0.88 ft
1617433	Kawaihae, HI	08/31/2016 11:54 (HST)	-0.55 ft	-1.37 ft	0.82 ft	0.82 ft
1615680	Kahului, Kahului Harbor, HI	08/31/2016 11:54 (HST)	-0.19 ft	-0.47 ft	0.28 ft	0.91 ft
1612480	Mokuoloe, HI	08/31/2016 11:54 (HST)	-0.09 ft	-0.63 ft	0.54 ft	0.69 ft
1612340	Honolulu, HI	08/31/2016 11:54 (HST)	-0.78 ft	-1.06 ft	0.28 ft	0.72 ft
1611400	Nawiliwili, HI	08/31/2016 11:54 (HST)	-0.54 ft	-0.86 ft	0.32 ft	0.61 ft

Center for Operational Oceanographic Products & Services (CO-OPS) | National Ocean Service (NOS) National Oceanic and Atmospheric Administration | U.S. Department of Commerce